



CLIMATE PROGRAM OFFICE

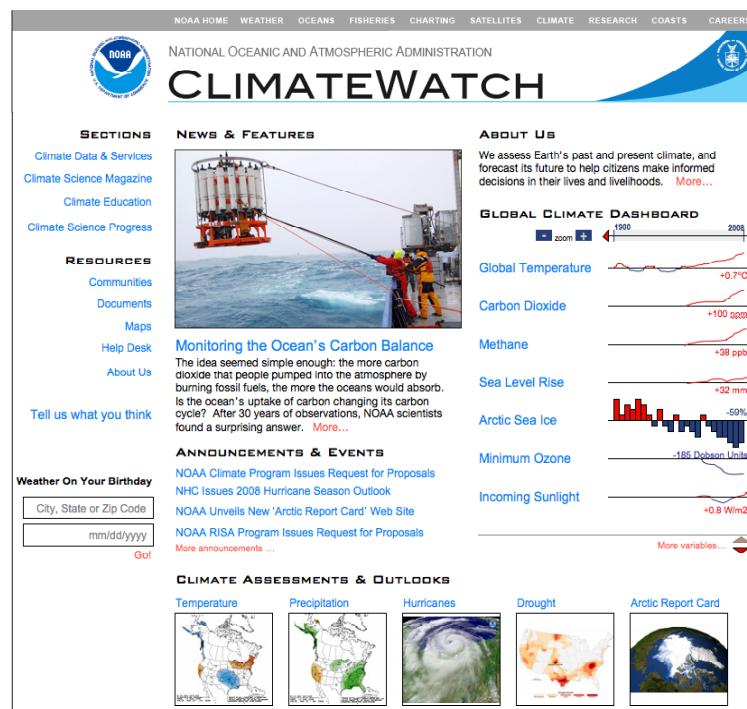
Communications and Education Program

Do Americans have a basic understanding of how climate affects their lives, and how humans influence the climate system?

Can the American public access the climate information they need and incorporate it into climate-related decisions that affect their lives and livelihoods?

Societal concern about the impacts of climate change is growing, as indicated by the rising number and nature of the questions submitted to NOAA in recent years. However, research shows that most Americans don't understand the causes of climate change. Public and private sectors of society are requesting easy access to credible climate science information to help them make informed decisions.

Climate influences almost every sector of society and the stakes are high: according to the U.S. National Research Council, up to 40 percent of the United States' \$10 trillion economy is affected by climate and weather events each year. As a leading provider of climate, weather, and water information to the Nation and the world, NOAA is a logical source for people to turn to for timely, authoritative climate information.



An early design concept for NOAA's Climate Portal.

Communications and Education Objectives

- Design and develop a Climate Portal that will simplify public access to climate data and information from NOAA and its partners.
- Engage various audiences to develop strategies and provide information that will enhance society's ability to plan and respond to climate variability and change.
- Develop a national climate education strategy that is aligned with national standards for education in science, technology, engineering, and math.
- Develop and conduct professional development programs for television meteorologists, educators, docents, and other climate communicators to increase their knowledge and improve their effectiveness in promoting climate literacy.

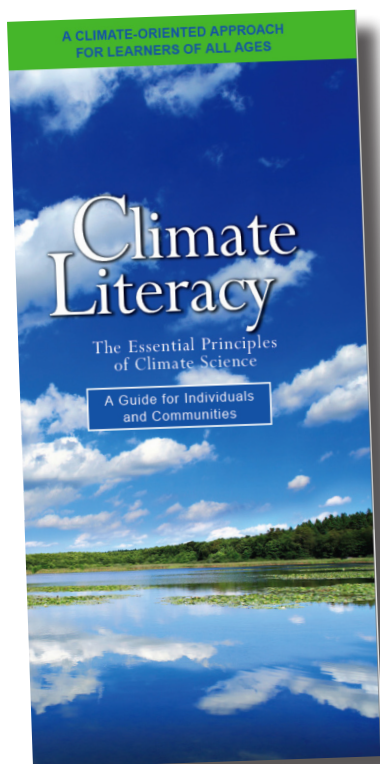
Communication and Education Program <http://climate.noaa.gov/education/>

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Approaches

The Climate Program Office's Communications and Education Program takes an audience-focused approach to promoting climate science literacy among the public. This program communicates the challenges, processes, and results of NOAA-supported climate science through stories and data visualizations published on the Web and via other popular media.

As part of a broad NOAA effort, the team is working to design, test, and develop a Web portal that will provide public access to climate data and information resources. This portal will feature interfaces adapted for four audiences: scientists and sectoral data users, policy leaders, educators and students, and the public. The portal will deliver climate science content that is free, readily accessible, easily understandable, and provided in flexible formats that maximize its usefulness.



Data Visualization

Earth's climate system is complex. Accordingly, NOAA uses a complex array of tools to study climate. Climate data are collected at many scales of time and space—from observing stations across Earth's landscapes and oceans, to missions onboard ships and aircraft, to Earth-observing satellites in space. Additional data are generated by computer simulations of the climate system. With guidance and direction from NOAA's climate experts, the Communications and Education Program produces visualizations of NOAA data. These products are powerfully illustrative for climate scientists and easy to understand for non-scientists. Data visualizations complement written information to maximize understanding of the climate system.

Climate Literacy Brochure

The Communications and Education Program led a community-wide effort to develop *Climate Literacy – The Essential Principles of Climate Science*. This document, available online at <http://climate.noaa.gov/education>, serves as a framework for understanding and communicating about climate science. The principles and concepts outlined in the brochure represent the knowledge regarded as important for citizens to know and understand about Earth's climate. The guide's intent is to promote greater climate science literacy among the public. Points in the guide can serve as discussion starters for individuals or launching points for scientific inquiry projects by students. The guide can also serve educators who teach climate science principles by detailing how the concepts meet science learning standards set by their district or state.

Recognizing that the goal of achieving broad climate literacy is larger than any single agency can meet, the Communications and Education Program also led the formation of a partnership called the Climate Literacy Network. This partnership includes government agencies, cooperative institutes, science laboratories, and science education organizations, all working together to increase climate literacy.